



Approaches to human-wildlife conflict management in and around Ayubia national park, Khyber Pakhthunkhwa, Pakistan

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General Note



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ABSTRACT

The present study has been designed to study the human-wildlife conflict management in and around Ayubia National park, KPK Pakistan. A total of 14 animal species has been studied in seven villages to investigate the conflict ratio. The results showed that there is no major significant difference conflict between villagers and the animals (i.e. $p=0.05$). However leopards are observed to be most conflicted animal in and near Ayubia National park. While Cuckoo, Pheasant and the parrots were the less conflicted animals in and near Ayubia National Park.

Keywords: Conflict, ANP, Livestock, human-animal interaction

1. INTRODUCTION

Ayubia National Park is found in KPK, Pakistan. It's a little natural park situated at twenty six kilometers from the Murree hill station established in 1984. It's been developed as a resort complicated from a mix of 4 mini resorts of KhairaGali, ChanglaGali, Khanspur

and Ghora dhaka in Galiyat. Ayubia was named in owner of President Ayub Khan. It has been managed by the KPK wildlife Department. The aim of establishing it absolutely was to conserve the temperate forests. Originally, the park stood at a locality of 857 acres; however in 1998 it absolutely was swollen to hide a vicinity of 1685 acres. The full population of the area living round the park is regarding fifty thousand peoples with the District Census Report, Abbottabad 1998. It absolutely was established by the Ayub Khan late President of Islamic Republic of Pakistan in 1958. Literacy rate is incredibly low and native communities largely depend upon natural resources of the park for his or her daily subsistence (Ibrahim et al 2010). The study highlighted the Ayubia park as a result of the solitary damp temperate forest in Muslim Republic of Islamic Republic of Pakistan with a high diversity of vulnerable plant and animal species. It's settled at North of capital of Islamic Republic of Pakistan among the Galliyat Hills (Khyber Pakhtunkhwa Province) of Pakistan. Conflicts between humans and predators arise most often as results of competition for shared, restricted resources. The conflicts are usually considerably moot once the resources concerned have priced and conjointly the predators involved area unit lawfully protected (Graham et al. 2005). The nature and magnitude of the matter varies from space to space counting on human increment rate and inadequacy of important natural resources particularly grazing and farm land (Kumsa & Bekele, 2014). The communities' effective participation in life conservation programmes is a lot of comprehensive and value effective technique in conservation of diverseness (IUCN, 2010).

1.1. Area Selection

The study has been conducted in April 2016 to survey the park and therefore the village's gift as regards to the Ayubia park. Ayubia park (ANP) is one among twenty one national parks in Islamic Republic of Pakistan and is located between 33°-01' to 34°-38' N latitude and 73°-20' to 73°-30' E line of longitude. Seven sites are selected for the study. These embrace Kundla (South west), Mallach (West), Kalaban (North east), Darwaza (South), Mominabad (South East), Riala (South East) and Ramkot (South East). A comprehensive form has been developed throughout this study to sample the human-wildlife Conflict. The form has been served to unit and therefore the samples were distributed thirty five equally to each village. Therefore the total numbers of sampling were 245 that were randomly selected. A comprehensive Questionnaire has been developed during this study to sample the human-wildlife Conflict. The questionnaire has been served to household and the samples were distributed 35 evenly to every village. So the total numbers of sampling are 245 which were randomly selected.

1.2. Data Collection Methodology

The first information has been collected through open and closed questionnaire. The questionnaire was designed to look at the employment and therefore the importance of ANP within the region. In addition the study was conjointly conducted to look at the stock management and therefore the human carnivores conflict among themselves.

1.2. Statistical Analysis

The LSD 0.05 has been performed on a software package Statistix 9.1 for the statistical purpose.

2. RESULTS AND DISCUSSION

Social and Economic Status of the Villagers

The study has been conducted form 245 peoples of different villages (n=245). Most of them are illiterate. The peoples with less than primary education are (n=63), post primary education or middle education (n=65), post-secondary education (n=71), post intermediate education (n=31) and graduates were (15). The reason behind the less number of graduates was that most of them are outside village because of their respective jobs. While among these 45% peoples were below poverty level (n=103), touching poverty line were 31.84% (n=78), medium economic level (n=35) and while rest are of good economic level but not too rich were 11.89 % peoples (n=29) respectively. The people related to 59.18% to agriculture and livestock because they had both occupation in same house (n=145), business (shops and hotel servants) were 27.34% n= 67 and employments in private and public sector were 13.47% (n=33) respectively.

Intensity of Human-Wildlife Conflicts in and around Ayubia National Park

The surveyed species contained 5 carnivores, 7 herbivores and 2 omnivores. Large carnivores were mentioned as the most problematic animals in and around Ayubia National Park as shown in Table 1.

Table 1 shows the Human-Wildlife Conflict

Species	No Problem	Small Problem	Medium Problem	Large Problem
Monkey	16%	34%	30%	20%
Common Leopard	11%	30%	32%	27%
Pheasant	39%	35%	20%	06%
Black Bear	34%	23%	30%	17%
Wood Pecker	38%	34%	16%	12%
Cuckoo	44%	30%	18%	06%
Jungle Crow	30%	38%	29%	23%
Parrot	45%	38%	13%	04%
Mule	27%	36%	24%	17%
Sheep	25%	34%	23%	18%
Snakes	16%	36%	29%	19%
Dogs	23%	40%	24%	13%
Hill Fox	19%	37%	33%	11%
Goats	37%	33%	20%	10%
LSD _{0.05}	28.8(AB)	34.14 (A)	24.35 (B)	14.50 (C)

Livestock Loss by Depredation of Wildlife in and Around Ayubia National Park

About 1592 livestock species had been owned by the interviewed peoples. The species embody hens, cocks, horses, donkeys, goats, oxes and buffaloes etc. However most of them don't have donkeys and horses. The donkeys and horses were in few homes as they're supply of their employment as a result of the ANP and near villages were in mountainous space wherever road facilities weren't out there to every village house. Therefore, peoples carried their stuff through horses and donkeys.

Methods of livestock farming and threats in and around Ayubia National park

About 73.9 % (n=181) of the interviewed villagers kept their cattles in soil roof homes/mud houses, 11.42 % peoples (n=28) kept their homes outside from homes resembling oxes on top of ANP mountain whereas few men principally two or three safe guarding their cattle's from every village at nighttime. Some safeguarded their cattle's in separate mud homes were 14.7 % (n=36).

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Carnivores removal methodology

The laws suggested that the killings of life in ANP and outside ANP were treated with stick penalisation and fines. However the killing of carnivores ought to be tried in self defense as prescribes in law. Throughout the study, it had been noticed that leopards were most conflicted animal in and around ANP. But people don't wish to kill it as a result of laws as they assume that they were reprovved by the laws. No poison had been given to carnivores had been rumored within the interviews. The explanations concerning poison standing square measure given below in table two.

Table 2 Reasons for not giving poison to Carnivores in and near ANP

Reason of not using Poison	Percentages
Don't have it	08%
Don't know how to use it	03%
Due to the order of government	72%
Think that it is wrong	09%
Too expensive	02%

The impact of human-wildlife interaction has been raised in varied countries due to the negative interaction of human-animal interaction between themselves. This will increase the threats to life. The current study has been developed to analyze the human-wildlife conflict in Gallies. In a neither situation wherever wildlife-induced damages to human property and life area unit neither controlled nor stipendiary, negative native attitudes towards conservation and life resources become entrenched (Okello and Wishitemi 2006). The current study indicates that the leopard is that the most conflictable animal in and around ANP. Whereas monkeys are destroy their crops like maize crop. Crows looked as if it would have dangerous impact of sound and also the chicken carnivore animal. These will culminate into potential damage to all or any concerned, and cause negative human attitudes, with a decrease in human appreciation of life and doubtless severe prejudicious effects for conservation (Nyhus et al., 2000). Improvement in livestock farming, developing awareness and strengthens the capability of managers to mitigate the matter were counseled (Acha et al., 2015). Potential answer is to possess a negotiated land use set up that harmonizing environmental conservation and native livelihoods, whereas diversifying people's socio-economic opportunities to cut back impoverishment and dependence on natural resources (Okello *et al.*, 2011). The results unconcealed that there's no major vital distinction of conflict between animals and humans (i.e. $p=0.05$). But a tiny low downside class has been discovered a lot of among all the categories (i.e. 34.14) as shown in table one. The cuckoo, wood pecker and pheasant looked as if it would be less conflicted animals in and close to ANP. Whereas the waste excreted and also the bees and different insects within the homes from sheep, buffaloes, and goat build individuals a touch conflicted.

3. CONCLUSION

It has been conclude that the human-animals conflict has been observed in various part of the world but there is no significant difference in and around Ayubia National Park about human-animals conflict.

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